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EXAMINER	
TIMBLIN, ROBERT M	
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2167	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/766,839	SUZUKI, TAKAMUNE	
	Examiner	Art Unit	
	ROBERT TIMBLIN	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 August 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5 and 11-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5 and 11-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action corresponds to application 10/766,839 filed on 1/30/2004.

Response to Amendment

Applicant herein amends claims 1, 11, and 14. No claims have been added and claims 6, 8, 9 and 10 have been cancelled in this amendment. Accordingly, claims 1, 3-5, and 11-14 are pending prosecution.

Prior Objections

In light of the correcting amendments, the objections to the specification and claims for minor informalities have been withdrawn. The specification objection has been removed in light of the cancelled claims 6, 8, 9, and 10.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-6, and 8-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ims et al. ('Ims' hereafter) (U.S. Patent 6,505,200). In the following citations, Ims teaches:

With respect to claim 1, An application server that retrieves data from a database using a retrieval request, which includes a retrieval condition, received from a terminal and transmits the data retrieved as a retrieval result to the terminal, comprising:

a cache memory (300) that stores in a correlated form (col. 9 line 53-65, col. 14 line 51-67; i.e. Ims teaches retrieval logic (retrieval condition) in the execution script of the cached object to return a fresh copy of data values to...re-populate the object's output properties (retrieval result). That is, Ims teaches storing the retrieval logic with the result in the same object to describe storing them in correlated form (e.g. they are stored together and are thus correlated)) the retrieval condition (col. 10 line 50-55; e.g. input properties) and the retrieval result (figures 3A-B, col. 5 line 64-67, and col. 10 line 55-60; e.g. output properties);

an update condition setting unit (col. 14 line 33, cache manager) that sets a cache update condition (col. 13 line 63; e.g. refresh policy, col. 15 line 64; e.g. update mode) that indicates when the cache memory is to be updated (col. 13 line 31-65 cache policy), wherein the database update condition includes a number of data records updated in the database within a predetermined period (col. 15 line 42-64, col. 17 line 18-29); and

an update processing unit (col. 16 line 58-62; i.e. processing an update) that reads the retrieval condition from the cache memory (300) upon fulfillment of the cache update condition (col. 16 line 58-67; cache policy), retrieves data as the retrieval result from the database using the retrieval condition (col. 16 line 63-67), and updates the

retrieval result in the cache memory (300) corresponding to the retrieval condition (col. 17 line 1-15), wherein

the update condition setting unit (col. 13 line 33, cache manager) sets the cache update condition (col. 13 line 63; e.g. refresh policy, col. 15 line 64; e.g. update mode) by acquiring data updated within a predetermined period (e.g. a count of updates, col. 15 line 60; e.g. updates found between 8 a.m. and 5 p.m.) from the database, and determining whether the number of data records is in a fixed range (col. 15 line 54-64; e.g. the number of updates requested within a particular time period (e.g. col. 15 line 54-58) and altering the update mode accordingly), and if the number of data records updated (col. 15 line 56; updates requested) is not in the fixed range (col. 15 line 58; 5 p.m. and midnight), the update condition setting unit sets the cache update condition (col. 13 line 63; e.g. refresh policy, col. 15 line 64; e.g. update mode) such that the number of date records updated (updated col. 15 line 56; updates requested) fall in the fixed range (col. 15 line 20-33 and line 55-58; e.g. delaying updates to be processed when traffic is low).

With respect to claim 3, the application server according to claim 1, wherein, when searching the database, the update processing unit acquires a database update condition that indicates when the database is updated and the update condition setting unit sets the cache update condition based on the database update condition acquired (col. 5 line 10-20, col. 10 line 8-15, and col. 13 line 65-col. 14 line 1-7).

With respect to claim 4, the application server according to claim 1, wherein a user sets the cache update condition (col. 10 lines 37-48).

With respect to claim 5, the application server according to claim 1, wherein the update processing unit sets next and subsequent cache update conditions using a date and a time of the retrieval result updated (col. 15 lines 52-60).

With respect to claim 11, An application server system comprising:

a plurality of application servers (figure 2, and 5 and col. 9 line 35-40), each of which retrieves data from a database using a retrieval request (col. 5 line 9-30), which includes a retrieval condition, received from a terminal and transmits the data retrieved as a retrieval result to the terminal, each application server including (abstract and figure 3A-3B).

a cache memory (drawing reference 300) that stores in a correlated form (col. 9 line 53-65, col. 14 line 51-67) the retrieval condition and the retrieval result (figures 3A-B, col. 5 line 64-67);

an update condition setting unit (col. 13 line 33) that sets a cache update condition (col. 13 line 63; e.g. refresh policy, col. 15 line 64; e.g. update mode) that indicates when the cache memory is to be updated, wherein the database update condition (col. 13 line 63; e.g. refresh policy, col. 15 line 64; e.g. update mode) includes a number of data records updated in the database within a predetermined period (col. 15 line 42-64, col. 17 line 18-29); and

an update processing unit (col. 16 line 58-62) that reads the retrieval condition from the cache memory upon fulfillment of the cache update condition (col. 16 line 58-67), retrieves data as the retrieval result from the database using the retrieval condition (col. 16 line 63-67), and updates the retrieval result in the cache memory corresponding to the retrieval condition (col. 17 line 1-15), wherein

the update condition setting unit sets the cache update condition (col. 13 line 63; e.g. refresh policy, col. 15 line 64; e.g. update mode) by acquiring data updated within a predetermined period (e.g. a count of updates, col. 15 line 60; e.g. updates found between 8 a.m. and 5 p.m.) from the database, and determining whether the number of data records is in a fixed range (col. 15 line 54-64; e.g. the number of updates requested within a particular time period (e.g. col. 15 line 54-58) and altering the update mode accordingly), and if the number of data records updated (col. 15 line 56; updates requested) is not in the fixed range (col. 15 line 58; 5 p.m. and midnight), the update condition setting unit sets the cache update condition (col. 13 line 63; e.g. refresh policy, col. 15 line 64; e.g. update mode) such that the number of date records updated (updated col. 15 line 56; updates requested) fall in the fixed range (col. 15 line 20-33 and line 55-58; e.g. delaying updates to be processed when traffic is low).

With respect to claim 12, the application server system according to claim 11, wherein the cache update condition of each application server differs from the cache update condition of any other application server (col. 15 line 65-67).

With respect to claim 13, the application server system according to claim 11, wherein the cache update condition of all the application servers is identical (figure. 3B, and col. 18 line 30-35).

With respect to claim 14, A cache update method comprising:

storing a retrieval request received from a terminal that includes a retrieval condition and a retrieval result (figures 3A-B, col. 5 line 64-67) retrieved using the retrieval request int a correlated form (col. 9 line 53-65, col. 14 line 51-67) in a cache memory (drawing reference 300);

reading the retrieval result from the cache memory when a retrieval request is identical to the stored retrieval request (col. 5 line 9-45);

setting a cache update condition based on a database update condition that indicates when the cache memory is to be updated (col. 13 line 31-65 cache policy);

reading the retrieval condition from the cache memory upon fulfillment of the cache update condition (col. 16 line 58-67);

retrieving data as the retrieval result from the database using the retrieval condition (col. 16 line 63-67); and updating the retrieval result in the cache memory corresponding to the retrieval condition (col. 17 line 1-15), wherein

the setting includes setting the cache update condition (col. 13 line 63; e.g. refresh policy, col. 15 line 64; e.g. update mode) by acquiring data updated within a predetermined period (e.g. a count of updates, col. 15 line 60; e.g. updates found between 8 a.m. and 5 p.m.) from the database, and determining whether the number of

data records is in a fixed range (col. 15 line 54-64; e.g. the number of updates requested within a particular time period (e.g. col. 15 line 54-58) and altering the update mode accordingly), and if the number of data records updated (col. 15 line 56; updates requested) is not in the fixed range (col. 15 line 58; 5 p.m. and midnight), the update condition setting unit sets the cache update condition (col. 13 line 63; e.g. refresh policy, col. 15 line 64; e.g. update mode) such that the number of date records updated (updated col. 15 line 56; updates requested) fall in the fixed range (col. 15 line 20-33 and line 55-58; e.g. delaying updates to be processed when traffic is low).

Response to Arguments

Applicant's arguments in the remarks in the reply filed 8/27/2008 (i.e. 'reply) have been fully considered but they are not persuasive.

Applicant's Arguments

A. In the reply to response to arguments (page 5 of the reply), Applicant argues the input properties at col. 10 lines 51 and 52 are not equivalent to the retrieval *condition.*

The Examiner respectfully disagrees because Ims specifies the input properties (i.e. categories or book titles) *are used in retrieving available book inventory information* (Ims, col. 10, line 51-53). In other words, Ims' input properties are essentially values used in the retrieval of information. Because the input properties of Ims are used to

retrieve information (i.e. col. 10 line 55, Ims states getting results with the input properties), they specify a retrieval condition that must be met to return results.

Furthermore, Applicant contends that the claimed retrieval condition and Ims' values used in retrieval (e.g. categories or book titles – col. 10 line 51-53) are not equivalent. The Examiner asserts that, from the above interpretation, the categories and book tittles at least describe the broadly claimed "retrieval condition." Furthermore the Examiner submits that from review of Applicant's own disclosure (page 9, line 8-9), which specifies "using the retrieval conditions (the SQL retrieval expression)", this interpretation is reasonable. In other words, Applicant's retrieval condition can be a SQL expression for accessing a database. Likewise, since Ims' input properties specify what to retrieve from a database, they can readily be seen as Applicant's retrieval condition (i.e. a retrieval statement).

Subsequently, Applicant argues that the word "condition" is used in Ims' differently than the interpretation given to it in the Office Action. The Examiner submits that there was no interpretation given to this portion (i.e. col. 19 lines 39-44) in the previous Office Action and this aspect was not relied upon to reject the retrieval condition. Therefore this argument is not found to be pertinent to this discussion and further moot.

B. Furthermore, the Examiner respectfully submits that the input properties (i.e. the retrieval condition to get results) and the output properties (i.e. results retrieved from the retrieval condition) are stored in correlated form. Specifically, the input and output

properties in Ims are stored in an instance of a [Java] bean (Ims, col. 10 line 54-65). Because these properties are stored *together* in the instance of a bean, they are stored in correlated form. In other words, the retrieval condition (input properties) and retrieval results (output properties) are populated into a bean object.

In response to the reply, the Examiner further clarifies the position taken in this aspect of storing, in correlated form, the retrieval condition and retrieval result. As previously mentioned, the input properties (retrieval condition) and retrieval results (results of the lookup operation using the input properties; col. 10 line 54-56) at least describe the broadly claimed “in correlated form”. In other words, Applicant claims no further details as to specify what "in a correlated" from is to precisely comprise. Therefore with the interpretation of storing these two aspects together in an object (i.e. a bean), this object gives the two elements (input/output properties) a relation (or “correlation"), and thus this limitation is taught.

Moreover, Ims teaches “in correlated form” in another example (e.g. col. 14 line 51-57). That is, Ims teaches a refreshing of a cached object wherein retrieval logic in the execution script of the cached object (col. 14 line 52-53) which are used to refresh (i.e. re-populating) the objects output properties (col. 14 line 56-57). Put another way, since the retrieval logic *in* a cashed object is used to *refresh* that *same* object’s output properties (results), the object stores the retrieval condition and result in correlated form.

In pages 6-13, Applicant substantially argues the key points found in elements **A** and **B** above (i.e. retrieval condition and storing that condition in a correlated form with the retrieval result). Examiner submits these arguments have been addressed accordingly above and therefore apply equally well with the same rationale.

C. Applicant adds the limitation "if the number of data records updated is not in the fixed range, the update condition setting unit sets the cache update condition such that the number of date records updated fall in the fixed range. Applicant further argues that Ims does not teach this limitation (e.g. page 7 of the reply, beginning of the page).

The Examiner submits that in a new interpretation of Ims, this limitation is taught (see respective citations in the above action).

That is, Ims teaches if the number of data records updated (col. 15 line 56; updates requested) is not in the fixed range (col. 15 line 58; 5 p.m. and midnight), the update condition setting unit sets the cache update condition (col. 13 line 63; e.g. refresh policy, col. 15 line 64; e.g. update mode) such that the number of date records updated (updated col. 15 line 56; updates requested) fall in the fixed range (col. 15 line 20-33 and line 55-58; e.g. delaying updates to be processed when traffic is low).

Put another way, Ims determines if the updates (e.g. updates from 8 a.m. to 5 p.m.) are not in a fixed range (e.g. 5 p.m. and midnight), then those updates are delayed so that they are updated in ("fall in") that range (e.g. the update condition is set to delay the updates to when network traffic is low).

In light of the foregoing citations from Ims, this feature is submitted to be disclosed. Arguments thereto have been rendered moot.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Timblin whose telephone number is 571-272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ROBERT TIMBLIN/

Examiner, Art Unit 2167

/John R. Cottingham/

Supervisory Patent Examiner, Art Unit 2167